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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

LY, NGHI H

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/773,729

Applicant(s)

ROUSSEAU, JEAN-RENE

Examiner

Nghi H. Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/09/06 has been entered.

### ***Response to Arguments***

2. a. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

b. Applicant's arguments filed 05/09/06 have been fully considered but they are not persuasive.

On page 8 of Applicant's remarks, Applicant argues that Leslie does not teach identifying public mobile telephone network users.

In response, Leslie does indeed teach identifying public mobile telephone network users (see column 15, lines 41-45, "*converting repeater 210*" and it reads on applicant's "*converter module*", and see column 24, lines 55-58, see "*FIG. 9 is a block diagram of a dial-up interface 360 for use with the repeater 210 of FIG. 6 for control and*

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*remote data collection. The interface 360 allows a remote user to send information to, or receive information from*. In order to “allows a remote user to send information to, or receive information from”, the teaching of Leslie inherently teaches Applicant’s “identifying public mobile telephone network users”. If **not**, the interface 360 will **not** “allows a remote user to send information to, or receive information from”). In addition, Applicant’s attention is directed to the teaching of Leslie in claim 1.

On pages 8 and 9 of Applicant’s remarks, Applicant argues that Leslie does not teach choosing identification modules in accordance with a criterion related to a contract of the user.

In response, Leslie does indeed teach choosing identification modules in accordance with a criterion related to a contract of the user (see column 6, lines 39-56, see “the first and second communication system are selected” and it reads on Applicant’s “*choosing*”. In addition, Applicant’s specification fails to further define what an “*identification modules*” is. Therefore, Leslie does indeed teach Applicant’s claim limitation with a broadest reasonable interpretation.

On page 9 of Applicant’s remarks, Applicant argues that Leslie does not teach detecting, by means of a database, that the user of a mobile telephone terminal has a contract with the GSM public network as recited in claim 6.

In response, Leslie does indeed teach detecting, by means of a database (see column 24, lines 42-46, see “*The mobile registration database 690 preferably receives such mobile registration messages from demodulator 630 via a signal path 642, and maintains a list of registered mobiles which are*

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*believed to be in the coverage area of the repeater and eligible for service thereby*" and it reads on Applicant's "detecting, by means of a database"), that the user of a mobile telephone terminal has a contract with the GSM public network (see column 16, lines 38-41, see "converting repeater 210 to service 1.9 GHz **GSM**" PCS mobile 218" and Leslie's "GSM" reads on Applicant's "contract with the GSM public network". In this case, see fig.6, the database 690 of Leslie is located inside the converting repeater 210 and the converting repeater 210 "has a contract with the GSM public network" as claimed).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leslie et al (US 6,404,775) in view of Tanaka et al (US 6,263,061) and further in view of Monica et al (US 5,459,761).

Regarding claim 1, Leslie teaches telecommunication equipment for setting up local telephone connections between at least one mobile telephone belonging to two-different network (see fig.2, wireless connection between base station 114 and antenna 128, and see wireless connection between subscriber 218 and antenna 140), the equipment comprising:

a downstream radio access system for setting up a downstream link to a base transceiver station of a first public mobile telephone network (also see fig.2, wireless connection between base station 114 and antenna 128), and

an upstream radio access system for setting up an upstream link to a mobile telephone of the second public network (also see fig.2, wireless connection between subscriber 218 and antenna 140),

wherein the upstream system and the downstream system apply the same mobile telephone standard (see column 2, lines 17-21, column 2, lines 51-56 and column 22, lines 41-52, see "*standard*". In addition, Applicant's claim fails to further define what kind of "standard" is. Therefore, Leslie does indeed teach Applicant's claim limitation with a broadest reasonable interpretation), which is that of the first public mobile telephone network (see column 6, lines 4-25, and see column 16, lines 5-30, and see column 4, lines 33-64),

and the equipment further comprising a service signal converter module between the upstream system and the downstream system (see column 5, lines 11-32 and see column 15, lines 41-45) adapted to:

repeat signals received from the upstream and downstream systems and adapt the received signals to suit the characteristics of the downstream and the upstream link, respectively (see column 15, lines 51 to column 16, line 5), and

extract from the signaling information belonging to the second network (Leslie, column 4, lines 48-51, see "extracting timing information from signals" and see column 14, lines 2-6), the downstream system or the converter module further comprising a

plurality of modules for identifying public mobile telephone network users (see column 15, lines 41-45, “*converting repeater 210*” and it reads on applicant’s “*converter module*”, and see column 24, lines 55-58, see “*FIG. 9 is a block diagram of a dial-up interface 360 for use with the repeater 210 of FIG. 6 for control and remote data collection. The interface 360 allows a remote user to send information to, or receive information from”*. In order to “allows a remote user to send information to, or receive information from”, the teaching of Leslie inherently teaches Applicant’s “identifying public mobile telephone network users”. **If not**, the interface 360 will **not** “allows a remote user to send information to, or receive information from”), the converter module further comprising means for choosing one or more identification modules in accordance with a criterion related to a contact of the user (see column 6, lines 39-56, see “the first and second communication system are selected” and it reads on Applicant’s “*choosing*”. In addition, Applicant’s specification fails to define what an “*identification modules*” is. Therefore, Leslie does indeed teach Applicant’s claim limitation with a broadest reasonable interpretation.

Leslie does not specifically disclose extract from the signaling information specific to the mobile telephones belonging to the second network and used to manage calls between the terminals of the second network and store that information in a local database.

Tanaka teaches extract from the signaling information specific to the mobile telephones belonging to the second network (column 1, lines 10-15, see “public network” and “private branch exchange”, and column 20, lines 58-67, see “extracts”),

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and used to manage calls between the terminals of the second network (column 20, lines 58-67, see “used for the subsequent call processing”) and store that information in a local database (see column 22, lines 27-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the teaching of Tanaka into the system of Leslie in order to provide a digital key telephone system capable of expanding or realizing various functions (see Tanaka, column 1, lines 60-63).

The combination of Leslie and Tanaka does not specifically disclose a telecommunication equipment for setting up local telephone connections between at least one mobile telephone belonging to only a private network and a public network.

Monica teaches a telecommunication equipment for setting up local telephone connections between at least one mobile telephone belonging to only a private network and a public network (fig.2, see only “private off-site network 209” and “public network 212”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the teaching of Monica into the system of Leslie and Tanaka in order to provide a method and apparatus that enable continuous service in a trunked communication system (see Monica, column 2, lines 14-16).

Regarding claim 2, Leslie further teaches characterized in wherein the downstream system comprising means for simulating mobile terminal links (column 4, lines 33-51, see “forward”).



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Regarding claim 3, Leslie further teaches the upstream system means for simulating base transceiver station links (column 8, lines 57-65, and column 12, lines 35-67, see “reverse”).

Regarding claim 4, Leslie further teaches the downstream system or the converter module includes a plurality of modules for identifying public mobile telephone network users, and wherein the converter module comprises means for choosing one or more identification modules (see column 28, lines 1-17).

Regarding claim 5, Leslie further teaches choosing the modules used which are controlled in accordance with a criterion related to a contract of the user (see column 4, line 52 to column 5, line 11).

Regarding claim 6, Leslie further teaches the converter module means for: detecting, by means of a database, that the user of a mobile telephone terminal has a contract with the GSM public network and for carrying out transfer without using any of the subscriber resources of the downstream system (see column 24, lines 42-46, see *“The mobile registration database 690 preferably receives such mobile registration messages from demodulator 630 via a signal path 642, and maintains a list of registered mobiles which are believed to be in the coverage area of the repeater and eligible for service thereby”* and it reads on Applicant’s “detecting, by means of a database”), that the user of a mobile telephone terminal has a contract with the GSM public network (see column 16, lines 38-41, see *“converting repeater 210 to service 1.9 GHz **GSM**” PCS mobile 218”* and Leslie’s “GSM”

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reads on Applicant's "contract with the GSM public network". In this case, see fig.6, the database 690 of Leslie is located in the converting repeater 210).

Regarding claim 7, Leslie further teaches the upstream system further comprises means for connecting a DECT or landline telephone (column 15, lines 29-35 and column 23, lines 35-40, see "DECT").

Regarding claim 8, Leslie further teaches the upstream system comprises a radio transceiver and electronic circuits, and wherein said radio transceiver and said electronic circuit set up upstream GSM links with at least one local GSM cellular telephone (see column 16, line 59 to column 17, line 5).

Regarding claim 9, Leslie further teaches the downstream system comprises a radio transceiver and electronic circuits and wherein said radio transceiver and said electronic circuits set up a downstream GSM link with a base transceiver station of the public GSM network (see column 16, line 59 to column 17, line 5).

Regarding claim 10, Leslie further teaches the information extracted from the signaling comprises: a type of a call, wherein the type of the call comprises one of an outgoing call from a mobile and an incoming call received from a mobile, a nature of a call, wherein the nature of the call comprises voice or data and a user identifier (see column 20, lines 1-13), wherein the user identifier comprises an international mobile subscriber identifier or a temporary mobile subscriber identifier (see column 28, lines 13-17 and see column 29, lines 34-44).

Regarding claims 11 and 12, Leslie further teaches the information extracted from the signaling is extracted from the signaling by a signaling capture and a

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processing card, and wherein said signaling capture and said processing card process the signaling in order to format it for use by said service signal converter module (see column 15, lines 52-64).

Regarding claim 14, the combination of Leslie and Tanaka does not specifically disclose the upstream system further comprises means for connecting a landline telephone.

Monica teaches the upstream system further comprises means for connecting a landline telephone (see Monica, fig.2, line 210).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the teaching of Monica into the system of Leslie and Tanaka in order to provide a method and apparatus that enable continuous service in a trunked communication system (see Monica, column 2, lines 14-16).

5. Claims 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leslie et al (US 6,404,775) in view of Tanaka et al (US 6,263,061) and further in view of Monica et al (US 5,459,761) and Official notice.

Regarding claim 13, the combination Leslie, Tanaka and Monica teaches telecommunication equipment according to claim 1. The combination Leslie, Tanaka and Monica does not specifically disclose the information stored in the local database comprises: a location information, a temporary mobile subscriber identifier, an encryption key, an authentication key, a result of a calculation performed in the public network to authenticate a user, and an identity of algorithms used for encryption and

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authentication. However, the examiner takes Official Notice that such feature as recited is very well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of the Leslie, Tanaka and Monica for providing a method as claimed, for storing the information in database.

Regarding claim 15, the combination Leslie, Tanaka and Monica teaches telecommunication equipment according to claim 1. The combination Leslie, Tanaka and Monica does not specifically disclose information extracted from the signaling comprises a user identifier, wherein the user identifier comprises an international mobile subscriber identifier. However, the examiner takes Official Notice that such feature as recited is very well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of the Leslie, Tanaka and Monica for providing a method as claimed, for identifying the subscriber.

Regarding claim 16 the combination Leslie, Tanaka and Monica teaches telecommunication equipment according to claim 1. The combination Leslie, Tanaka and Monica does not specifically disclose the information extracted from the signaling comprises a user identifier, wherein the user identifier comprises a temporary mobile subscriber identifier. However, the examiner takes Official Notice that such feature as recited is very well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of the Leslie, Tanaka and Monica for providing a method as claimed, for identifying the subscriber.


### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly



CHARLES APPIAH  
PRIMARY EXAMINER